

a mouse, a pen, a voice input device, a touch input device, a display, speakers, a printer, etc.

[0052] Turning to the contents of the memory 218 in more detail, the memory 218 may include an operating system 220, one or more data stores 240 and/or one or more application programs, services, or other software modules, which are generally executed by a processor (e.g., the processors 210 and/or 221) for implementing the features disclosed herein.

[0053] Example modules are shown in FIG. 2, but functions and embodiments described herein can utilize a subset of the features provided by the modules and/or additional functions can be provided. Additionally, while the example modules will now be briefly discussed with regard to FIG. 2, further specific details regarding the example modules are provided below in the descriptions of subsequent Figures.

[0054] As an example module of memory 218, an order module 402 can be provided for receiving and/or processing orders 104 for MOD items 110. A supplier interface module 602 can be provided for interfacing with suppliers 103 of 3D manufacturing instructions 107 associated with MOD items 110. A manufacture module 802 can be provided for providing instructions, for example to the 3D manufacturing apparatus 108, for manufacturing one or more MOD item(s) 110. A delivery module 1002 can be provided for coordinating delivery of the MOD item 110 to the user 102.

[0055] FIG. 3 is a flow chart representing a process 300 for providing MOD items 110 to users 102 in accordance with some embodiments. Some or all of the process 300 (or any other processes described herein, or variations and/or combinations thereof) may be performed under the control of one or more computer systems configured with executable instructions, such as the modules described herein, and may be implemented as code (e.g., executable instructions, one or more computer programs or one or more applications) executing collectively on one or more processors, by hardware or combinations thereof. The code may be stored on a computer-readable storage medium, for example, in the form of a computer program including a plurality of instructions executable by one or more processors. The computer-readable storage medium may be non-transitory. Moreover, unless indicated otherwise, acts shown in the processes are not necessary performed in the order shown, and/or some acts can be omitted in embodiments.

[0056] The process 300 includes an order operation 302, an interface with supplier(s) operation 304, a manufacture operation 306 and a deliver operation 308. In the order operation 302, the order module 402 (e.g., of FIGS. 2, 4) can receive and/or process an order 104, for example received from a user 102 via a user device 204. In operation 304, the supplier interface module 602 (e.g., of FIGS. 2, 6) can communicate with third party computers 214 associated with suppliers 103 of 3D manufacturing instructions 107 associated with the selected MOD item 110.

[0057] As can be understood, the 3D manufacturing instructions 107 may be obtained and stored well prior to receipt of orders 104 from users 102, so that the 3D manufacturing instructions 107 are available when an order 104 is placed. In addition, in embodiments, the supplier interface module 602 is not used and/or operation 304 is omitted. For example, the 3D manufacturing instructions 107 can be generated by the service provider computers 216. In the manufacture operation 306, the manufacture module 802 can prepare instructions for a 3D manufacturing apparatus 108 to produce a MOD item 110. In the deliver operation 308, the

delivery module 1002 can provide instructions regarding the delivery of the MOD item 110, including, but not limited to, determining a delivery method for the MOD item 110 (e.g., to provide 3D manufacturing instructions 107 directly to the user 102 as at 112 in FIG. 1; to provide a MOD item 110 at a pick-up location as at 114 FIG. 1; or to ship a MOD item 110 to the user 102 as at 116 in FIG. 1).

[0058] FIG. 4 depicts aspects of an example order module 402. Order module 402 can include an item selection module 404, an authorization module 406, a customization module 408, a delivery preferences module 410, and/or a payment module 412. The item selection module 404 can be provided for receiving and/or processing a selection by a user 102 of an item provided by the service provider computers 106, which may be, for example, the MOD item 110. An authorization module 406 can be provided for verifying authorization credentials of a user 102. A customization module 408 can be provided for receiving customization options selected by a user 102 for the selected MOD item 110. A delivery preferences module 410 can be provided for receiving delivery preferences of a user 102 for the MOD item 110. A payment module 412 can be provided for receiving payment by a user 102 for the MOD item 110.

[0059] FIG. 5 is a flow chart representing a process 500 that can be executed by the order module 402 for receiving an order 104 of a user 102 for a MOD item 110. At 502, the order module 402 can receive a selection from a user 102 of a MOD item 110 via the network 212 and/or the user device 204. For example, the user 102 may select a MOD item 110 displayed via the browser application 206 on the user device 204 in the form of a part number, description, and/or image of a MOD item 110, and the item selection module 404 can receive the selection. In some aspects, the order module 402 may provide a user interface for a user 102 to select a subcomponent out of a larger assembly, and the item selection module 404 can receive the selection of the subcomponent as a MOD item 110.

[0060] At 504, the authorization module 406 can determine whether or not the selected MOD item 110 requires authorization. For example, a selected MOD item 110 might be a medical device or a firearm or another MOD item 110 of a restricted or regulated category. At 506, if the authorization module 406 determines that the MOD item 110 requires authorization, the authorization module 406 can assess user credentials. For example, the authorization module 406 can compare a license or code number associated with a user 102 to determine if the user 102 is authorized to purchase the MOD item 110. The authorization module 406 can access authorization information utilized at operations 504 and 506—such as authorization requirements and/or user credentials—via a user device 204, a third party computer 214, a service provider computer 216, or any combination thereof.

[0061] At operation 508, if the authorization module 406 determines that the user 102 is not authorized for the MOD item 110 (e.g., credentials associated with the user 102 are insufficient for the MOD item 110), the authorization module 406 can proceed to operation 510 and handle accordingly, such as terminate the transaction, request further credentials, send a message to the user 102, or some other handling operation. The process 500 may return to operation 502 after handling so as to provide the user 102 an opportunity to select a different MOD item 110 that does not require the authorization. If the user 102 is authorized to order a MOD item 110